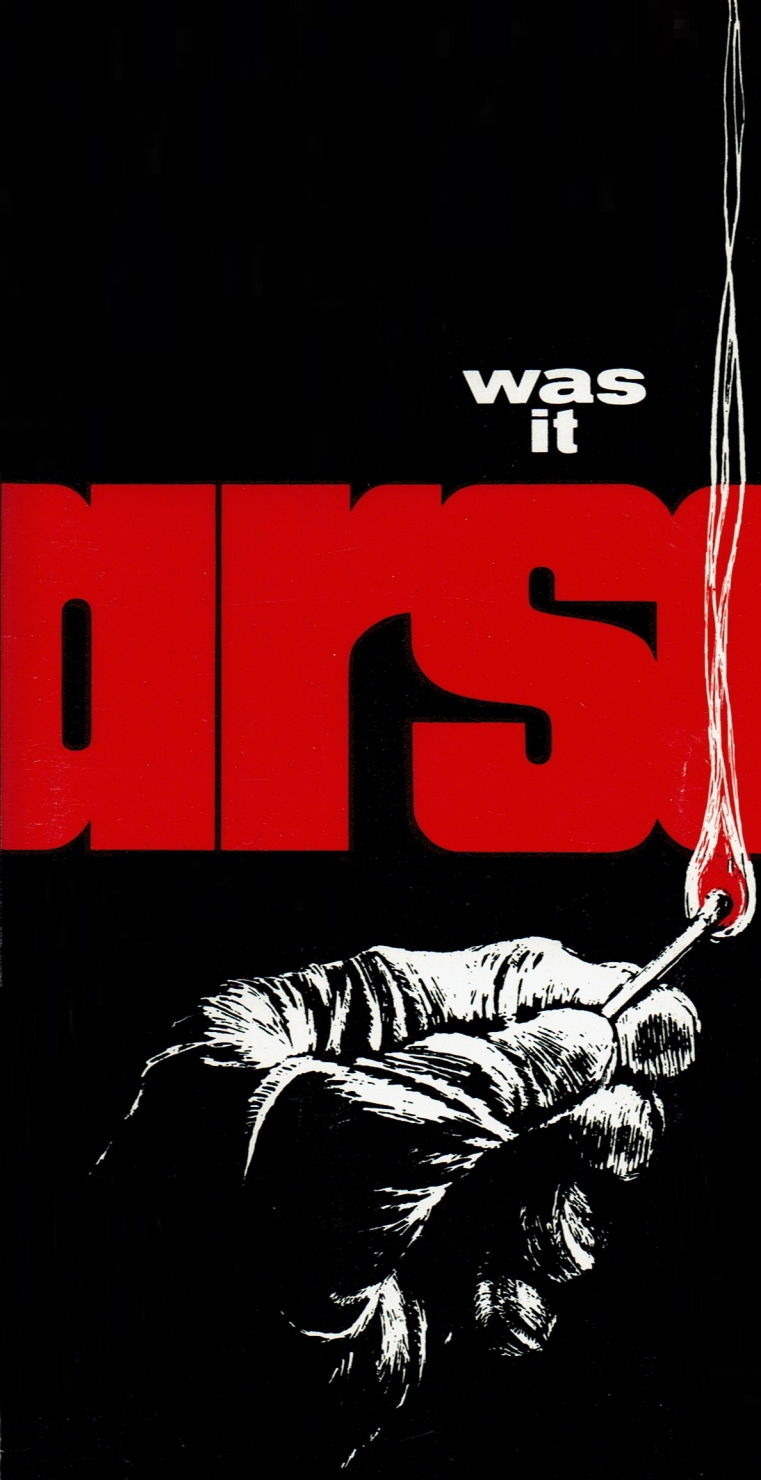
was it arson



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The greatest deterrent to successful fire investigation is the popular but false belief that arson is impossible to establish because all the evidence burns up in the fire.

That statement is simply not true. It is often made by people who believe it only because they are not qualified to prove otherwise and they will not invest the time and effort required to develop the necessary knowledge.

At most fire scenes evidence is available to establish cause and origin. The evidence may have changed in form or appearance and may require hours of hard work to recover, but it's there.

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know your arson

Every individual concerned with property insurance or law enforcement must consider the possibility of arson whenever a fire occurs. Frequently, information and/or evidence is available only during the original inspection. If that data is overlooked or evidence destroyed, it may never again be available. Although it is impossible to provide a simple, brief or certain formula for detection of arson, this booklet covers the basic requisites for anyone connected with the distribution and protection of insurance funds or investigation of the cause and origin of fire.

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Arson is a multimillion-dollar drain on the business community, on municipal budgets and on the insurance industry.
Recent studies indicate incidents of arson have increased 1300% since 1950.
Reports indicate more than 30% of all building fires are incendiary in origin. It has been estimated that the cost of arson is four times greater than that of any other crime and possibly exceeds the total cost of all violent crime. This booklet—a basic primer for insurance executives and adjusters, public officials and law officers not versed in the intricacies of arson—was prepared by

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establish the motive

The Motive.
All fires fall into one of three categories: accidental, providential or incendiary. Where fraudulent fire occurs, a human hand is involved. Somewhere, perhaps hidden in a maze of seemingly unimportant facts, lies a motive.

Although it is not essential to establish motive to obtain conviction for the crime of arson, the establishment of motive strengthens a case considerably. It may be the first indication of potential arson. Establishment of a motive also aids in identifying a potential or possible suspect. The following seven motives for incendiary fires are routine to arson investigators:

1. Fraud
2. Effort to hide other crime
3. Jealousy
4. Revenge
5. Thrill
   a. Pyromania
   b. Juvenile
   c. Sex
6. Riots—vandalism
7. Terrorism

Fires Traceable to Insureds.
As insurance representatives, adjusters first look for a motive causing an insured to burn his own property. "Insured set" or "insured inspired" incendiary fires are probably the most common and cause a greater drain on insurance dollars than fires set for other motives. Obviously, an insured's financial condition is of primary importance in establishing a motive. A review of his financial status may indicate that two basic choices prevailed: file bankruptcy or sustain a severe fire loss.

Is There a Need for Cash?
Insurance men have frequently discounted the possibility of arson because an insured is heavily mortgaged and settlement on the building portion of the loss serves only to retire those mortgages. However, often completely overlooked is the fact that payment will also be made on stock, equipment, personal property and business interruption.

Many individuals find the thought of filing bankruptcy repugnant and may resort to almost any alternative before admitting failure and the inability to honor just debts. They cannot accept the embarrassment of public notice of failure as a businessman, of failure in the management of finances and in becoming the subject of contempt. They may prefer to avoid bankruptcy by converting assets into immediate cash. The need for cash may be so urgent that neither the time nor the stigma associated with all-out disposal of assets or real estate to settle debts is possible. Or the motive may be elimination of debts or mortgages rather than retention of cash.

If, through a fraudulent fire, assets are converted to cash, the embarrassment of bankruptcy is eliminated, credit ratings are protected and one is in a position to refinance and renew business with a clean slate.

Arson has solved the insured's problems and put him back into business.

Is There a Reason to Terminate a Lease?

Incendiary fires may occur when an insured urgently needs to terminate a lease. This potential motive should be considered when a fire occurs in a tenant-occupied building, regardless of whether the insured is lessor or lessee. If he is the lessor, subrogation should be considered.

Is There Cause to Relocate a Business?

The location of a business and the terms of the lease may be draining an insured (or tenant) to the point that relocation is vital to the continuation of the business. Relocation of principal highways, a deteriorating neighborhood, loss of labor supply, new competition and excessive costs should all be considered. Changes in public transportation, which allows workers in or products out, also might motivate the desire to terminate a lease. Loss of right-of-way or access is an established motivating factor.

Be alert to any factors affecting the business that may have changed or deteriorated since the effective date of the lease. Here insurance funds are not the primary motive and the current financial status of the insured also is not the motivating factor. Future financial status is the factor.

Labor difficulties or labor costs are a primary incentive in relocating a business. The same factors may adversely affect the salability of that business on the open market. An insured cannot relocate unless he can dispose of real estate or terminate his lease, eliminate or relocate stock, machinery and equipment and, at the same time, retain valuable employees. Sufficient fire insurance supported by business interruption coverage may appear to be a logical solution.

Is There an Unprofitable Contract?

Depending on the type of business involved, look at existing contracts as the elimination of an unprofitable contract may be imperative to the continuation of a business. For example: A manufacturer was producing an article under contract at $125.00 per item. When it was determined that the actual cost was $210.00 per item, the motive was established. He was approaching bankruptcy.

Look Beyond Immediate Profits.

Many varied motives incite fraudulent fires. New ones appear on the scene regularly. Basically, an investigator must consider the facts beyond immediate profit. Is the fire advantageous to the insured, his tenant or any other individual directly associated with the premises? If it appears that the insured will benefit in any manner, the fire warrants further investigation.

Don't Limit Motive Investigation.

Fires have been ignited on the premises of an innocent person — for example, on a third floor in order to produce water damage to goods on the second floor. Don't ignore anyone associated with the fire even if that person appears to be a victim rather than a suspect.

Get People Talking; Then Listen.

The motives of spite, hatred, revenge, jealousy, terrorism and the desire to eliminate competition are interwoven. If establishment of such a motive aids in the identification of the responsible party, an excellent subrogation case may develop. When the opportunity arises to converse with an insured, a member of his family, an employee or an associate, let him talk. Be alert to the relationship of the insured with his family and associates. One of the greatest mistakes committed by adjusters and investigators is they sometimes talk more than they listen. When an individual is talking, regardless of the subject, vital information or evidence may eventually be provided. Let him talk — about anything — and sooner or later the conversation will get around to the subject at hand.

Canvass the Neighborhood.

Very often, an hour invested in a neighborhood canvass will produce surprising results. Simple questions to neighbors — "Did you see the fire?"..."What did you see first, flames or smoke?"..."Where?" — will often get them talking, providing vital information.

During a recent routine investigation of a serious dwelling loss, a neighborhood canvass was made. Once provided an opportunity to talk, the neighbors stated that the insured and his house guest were suspected homosexuals. A deeper probe was made into the insured's relationship with his guest. It developed that the association was deteriorating and it was eventually established that the insured destroyed his dwelling to force relocation and separation from his partner.

In another investigation, a neighborhood canvass established that a husband and wife were having marital difficulties. The wife had confided to a talkative neighbor that she suspected her husband of extramarital affairs. She was also overheard commenting that she would burn all his clothes, except his work clothes, in order to restrict his social life. When confronted, the wife admitted she had set the fire, which was soon out of control.

Is the Fire Advantageous to Anyone?

In conducting a routine fire investigation, be alert to any indications that the fire benefited any individual. Fires ignited by insureds are not necessarily limited to those producing a dollar return. Fires ignited by a third party for any reason beneficial or satisfying to him may result in recoverable subrogation.

Other Crimes Possible When Arson Is Perpetrated.

Arson is commonly associated with other illegal or improper acts.

Be alert to possible fraud (as a result of forged claim documents such as altered invoices, etc.), mail fraud or — for civil defense — misrepresentation of material facts.

Deliberate falsification of material facts given to an adjuster in a statement can be the basis of a civil defense.

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examine the fire scene

Begin With Routine Trouble Indicators.
Every adjuster or loss man should be constantly aware of certain routine indicators. When the scene of a fire is visited, first walk around the outside of the building. Note areas of severe burning, possibly where a window burned out or fire burned through a sidewall.

Relating exterior damage to interior damage may assist in determining points of severe burning and/or point of origin. Be alert to objects or items lying around the outside. Are they normal to the occupancy? Do they belong? When interior inspection is made, inspect the entire premises. Cover the dwelling from basement to attic.

Non-Communicating Fire Damage Is Suspicious.
While inspecting the area of burning, specifically note whether there is communication between the burned areas. If there is severe burning on the north wall of the living room and burning on the south wall of the dining room with no obvious communicating fire damage, there may have been two separate fires. Arson fires are frequently ignited in several different locations in a building. If the building has been efficiently or professionally burned, the loss may be total and it will be impossible to segregate fires. But in many cases, especially when an amateur sets the fire, oxygen will be consumed and the fires will extinguish before joining or communicating. If there are unrelated areas of burning, arson must be seriously considered.

Note Possible Trailers.
An arsonist wants the fire to spread. Note any items that may have been used as possible trailers to communicate the fire from one area to another – for example, clothing, bedding or cutains that have been draped from one item of furniture to another, or possibly from one room to another. When an amateur is involved, he expects the material used to communicate the fire to be totally consumed. This is not always the case. The remains are clues that materials were used to link the fire to other combustible substances.

Determine Lowest Point of Burning; Deepest Char Area.
Fire generally burns up and not down. While the direction can be affected by draft, accelerants or other influencing factors, the foregoing is a reasonable rule of thumb. Note the lowest point of burning. The "lowest point" does not mean the first floor versus the second floor or the basement area, but simply the point of burning in any particular room closest to the floor. At the same time, note where the deepest and most severe char has occurred. The lowest

point of burning and the deepest char area will normally indicate a point of origin. Where separate and distinct "low points" of burning are noted and/or several unconnected areas in the dwelling with similar deep charring are involved, the situation indicates more than one fire was ignited.

Check the Residue Clue.
As the low point of burning is determined, consider any item that might have burned and fallen to the floor. Normally, there will be residue, which if carefully reviewed, tells a story. Be careful not to overlook points of origin because plaster has fallen from the wall or ceiling and smothered a fire at the point of origin. By locating that point it may be possible to identify evidence of incendiary fire.

In an incendiary fire, the odds are that an amateur is involved. If so, there may be evidence of incendiary devices or "sets" that either fail to go off or burn out with little damage. If such evidence exists, it will likely be removed or covered before a second inspection is made.

Once the low point of burning and the deepest char area are located, consider anything in that vicinity that could have caused an accidental fire — wiring outlets, electrical appliances or space heaters, etc. If there is nothing present that could have started an accidental fire, further investigation is indicated.

Check Doors and Windows.
If windows are "blocked" and prevent fire from being visible from the street, arson is a strong possibility. Windows often have been painted for this purpose. Note the doors and the floor area just inside the doors. If the floor area inside a door has an unburned section, especially in a round or square pattern, this may be a situation where furniture or boxes were pushed against the doors to keep them closed or to interfere with fire fighting activities. The same situation may result when furniture or other items are used to keep interior doors open.

Search for Fire Patterns.
Everyone knows what happens when a gallon of fuel is thrown on the floor and ignited. The fire will follow the same pattern as the fuel. It will normally burn deeper along the trail of the fluid and show a definite path. If such a particular pattern of burning or charring is observed, question whether the fire pattern is normal for an unassisted or unaccelerated fire.

Check Closets.
A proper fire inspection requires the opening and checking of every closet. If the closet has been gutted by fire, common metal hangers, which do not burn, should be in the debris. The absence of any hangers may well indicate the absence of clothing. The obvious question: Why is there no clothing in the dwelling?

Concrete Tells a Story.
When concrete is subjected to intense heat, such as is caused by an accelerant, a condition referred to as "spalling" occurs. Portions of the cement will flake or break away, sometimes to a depth of one or one and a half inches. Spalling will assume the shape of the accelerant thrown on the cement.

Check All Food Stocks.
Do not fail to check pantry or cabinet shelves. How well stocked with food was the dwelling? Open the refrigerator. An empty refrigerator could indicate that the insured knew no one was going to be residing there the day after the fire.

Check Thermostats, Oil Level and Oil Burner Connections.
A thermostat set at the highest temperature possible should be questioned. Always check the oil burner, both for the amount of oil in the tank and the tank connections. Make sure the connections are still intact. Contact the company supplying oil to the building and determine whether the insured is on a scheduled delivery, the date of last fuel oil delivery and the approximate number of gallons of oil that should have been in the tank on the date of the fire.

Check Wattage of Light Bulbs.
If a 300-watt bulb is placed in an unlikely area, a problem is indicated. Heat generated by light bulbs varies tremendously with the wattage of the bulb. A bare 25-watt bulb will generate 110° Fahrenheit, but a bare 300-watt bulb will generate 374° Fahrenheit. A 300-watt bulb found near a point of origin with a volume of combustible material — possibly covered by falling debris — may take on critical importance.

Look for bulbs that have melted and formed a point, or "finger." That finger will point to the hottest area of the fire and may well be pointing to the area of origin.

Check Loading of Conductors.
A deliberate overloading of conductors, including extension cords, cannot be ignored. A No. 10 conductor will safely carry 30 amps, but a No. 14 conductor will safely carry only 15 amps. When the load of the conductor is doubled, the heat factor is multiplied four times.

Is a Pet Absent? Are Valuable or Prized Items Missing?
Be especially alert to items of personal property that may have been removed from the premises prior to the fire. Everyone has highly prized items of personal property in his place of business or at his home that he will not destroy. The list can range from family wedding pictures to stamp albums. It might be a signal. Few insureds can bring themselves to destroy cherished possessions. Valuable property taken to a collector or appraiser the day before the fire should be cause for suspicion, regardless of the reasons given.

Examples:

a. An insured is known to be a collector of antique guns and yet at the fire scene only the remains of modern or inexpensive weapons are identified.

b. Insurance includes a scheduled mink coat and the fire occurred at a time when the coat should have been in the home but no evidence is found of such a garment.

c. An insured decides to visit a friend the night of the fire and takes the family dog, cat and parakeet with him.

d. A man is an avid hunter and yet identity cannot be made of hunting weapons at the scene.

e. Books and magazines on stamp collecting are scattered around but no stamp collection.

Visual inspection may give clues as to what should be present but is missing.

Thus, it is important to stay alert to necessary information during conversation with the insured, his family or associates. Information may be obtained not only from conversation but in inspection of other property in the house. If there are some items that relate to a particular hobby and yet the principal items are missing, ask some questions. A review of insurance coverage or information from the agent should indicate property that the insured prized sufficiently to specifically insure. If that property should normally be in the house and is missing, a possible problem is indicated. Be alert to what is present at scene that does not belong and what is absent that does belong.

Don't Limit Inspection.
If a fire occurred on the first floor or in the basement, do not limit inspection to the fire-damaged area. Inspect the entire premises—you may be surprised at what you find. Cover the building from top to bottom. Remember, you are looking for something present that does not belong or the absence of something that should be present.

Check Outbuildings.
If the premises include a detached garage or tool shed not involved in the fire and sufficiently far from the house to be reasonably safe, take the time to look inside. This action can be explained to an insured by simply stating that following any loss, a routine inspection is made of all remaining property for underwriting purposes. Be alert for items normal to the living quarters that may be stored in the outbuilding.

Was the Insurance Recently Increased?
Excessive or recently increased insurance is so obvious a factor that it is frequently overlooked. If insurance has been placed or increased shortly before the fire, determine the reason. Was the insurance increased at the request of the insured, at the suggestion of the agent or possibly as the result of a company inspection? Check with the agent. Had he been trying to sell the insured business interruption insurance for five years without success until thirty days prior to the fire? When the insured increased his insurance, did he give the agent any reason for the increase? Was new property acquired such as additional machinery, furniture, etc.?

A Word of Caution.
By law all fires are presumed accidental until proven otherwise.

A point of caution: Whenever an investigation of a fire scene is made, be constantly alert to the possibility of an accidental or providential fire. If it is expected to establish a corpus delicti, one must first prove that the fire could not or did not occur from accidental or providential cause. If it appears that the fire did not originate from an accidental or providential cause, the assistance of a qualified investigator should be solicited.

Expert testimony will be required to establish both the elimination of possible accidental cause and to establish corpus delicti of arson. If you do not believe you can qualify your testimony, protect yourself and your principal and call for assistance from a qualified investigator.

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protect the evidence

The Value of Evidence.
Evidence is only of value if it can be utilized to prosecute a responsible party or defend an action against the insurer. If evidence is identified at the scene of a fire do not disturb it. Do not remove the evidence from the premises. Solicit assistance from the fire marshal, fire chief, police chief, sheriff or any qualified law enforcement or fire fighting official. To be useful, evidence must be properly documented and preserved.

How to Document and Preserve Evidence.
Evidence removed for analysis to determine the presence of accelerants must be preserved in airtight containers marked with the date, time and the exact location from which the samples were obtained. A street address is not sufficient; the exact area within the building must be pinpointed. Evidence must also be marked with the identity of witnesses present and the identity of the person(s) collecting the samples.

Do Not Rely on Amateur Photographers.
Photographs, properly taken, may prove to be the difference between valuable evidence and worthless debris. Pictures of evidence to be removed should be taken either by a qualified law enforcement photographer or a professional photographer. The photographer must be prepared to testify that he photographed the scene, processed the film and developed the prints. The type of testimony required can only be furnished by a competent qualified photographer.

A series of photographs should be taken. They should include: 1) the undisturbed evidence; 2) the actual removal of the evidence (include recognizable and identifiable witnesses in each photograph); 3) the evidence after removal.

For example: If a section of copper tubing is to be removed, photographs are vital before it is disturbed. In addition, photos should show actual removal, the piece being held by the person who removed it, and close-up pictures of the severed ends. This type of photography is no job for an amateur.

The investigator must consider that he may be required to offer testimony months after his inspection. He cannot rely on his memory. Proper notes of what was seen and a record of the scene of the fire in sketch form should be made. Proper notes and sketches may make the difference between a valuable witness and a victim of a competent defense attorney.

How and When to Take a Proper Statement.
Verbal statements by an insured, witness or property owner are subject to change. A proper investigation demands that all statements pertinent to a case be reduced to writing or recorded. If a recorded statement is taken, the first comment or question on the recording should be a request to the individual involved for permission to record the conversation. Recorded permission at the beginning of the statement and confirmation of that permission with the last statement or comment on the tape must be obtained.

The Importance of Taking a Proper Statement.
In a fraudulent fire, the entire defense may rely on the ability of the adjuster to establish and prove statements made to him and information provided during the original interview. A statement obtained during the original interview often establishes facts available only at that time. It may also establish subsequent misrepresentation or other information important to a proper defense. Oral statements are easily challenged, but the written or recorded word is difficult to dispute. If adjusters do nothing more than learn to take proper informative statements during original interviews, the ability of the industry to

resist fraudulent claims will be greatly enhanced. An adjuster's value is determined by his reputation. That reputation will not be enhanced if the lack of a statement on a fraudulent case under investigation contributes to a successful recovery by an insured.

Timing and Use of Words Is Important.
Avoid the word "statement"; request a recorded "interview." Avoid using first names. Keep it businesslike – Mr., Mrs., or Ms.

The most likely time to obtain truthful or incriminating statements from an individual is during the first interview. It also may be the only time a written or recorded statement is available. Most insureds and/or witnesses expect an adjuster to obtain a statement and will cooperate. During the first interview, a statement will be routine and information may flow freely to the adjuster. Once an individual learns the fire is under investigation, statements will change, memory may fail and facts may be distorted. Proper substantiation of evidence and information is vital.

Suggested Recorded Statement Format.
"This is John Doe of INS Investigations Bureau interviewing Frank Small in regard to a fire that occurred at 14 City Street, Anycity, New Jersey, on July 4, 1978. Interview taking place at Mr. Small's business location, 4 City Street, Anycity, New Jersey. Present during interview: Mr. Frank Small, Mrs. Small and Lt. Paul Jones of N.J. State Police. Date is July 5, 1978 and the time is 8 p.m.

"Mr. Small are you aware our conversation is being recorded and do I have your permission to record our interview?"

"Will you please give me your full name, legal address and date of birth?"

Proceed with questions but be prepared – you can't take a good statement unless you know what you want to ask.

Interrupting a Statement.
If the recorder is turned off during an interview – state the time the recorder is off and the reason for stopping when turned back on. Identify yourself and all people still present and state the time.

Concluding Statements.
Finish the interview by again identifying yourself and all people present. Confirm recording permission. Mr. Small will you once again give me your full name?" "Did I have your permission to record this interview?" "This is John Doe concluding interview on July 5, 1978. The time is 8:48 p.m."

Have the subject sign and date the cassette.

The Adjuster Is Not a Law Enforcement Officer.
When at the scene of a fire the adjuster is on private property. He is not a police officer and therefore must conduct himself as a private citizen. Everything in the involved building is private property and if that property is to be removed, such action must be with the permission of the owner or left to appropriate law enforcement authorities. If the adjuster finds personal property believed to represent evidence, he should immediately obtain assistance from fire marshals or law enforcement officers.

All in All, Use Common Sense.
In all situations, common sense is the key factor in the inspection and investigation. Particular attention should be paid to items out of place material or products foreign to the building or to the particular area of the building. The same applies to items that should normally be found in certain locations and are missing. Keep in mind that the individual who sets a fire fully expects the evidence of the crime to be totally destroyed. He may well be careless or incompetent and, if one uses common sense, the carelessness of the arsonist will provide good cause to call in the proper fire and/or police authorities.

Arson has been with us since man discovered fire. The adjuster must be the first line of defense in protecting insurance funds and, thereby, the insuring public.

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the model arson law

The following reviews the key parts of the highly effective Model Arson Law, which has been accepted and used as a basis for arson statutes in a majority of states. Research of the law on arson as it is written and applied in each particular state is recommended.

Burning of dwellings.
Any person who willfully and maliciously sets fire to, burns or causes to be burned, or aids, counsels or procures the burning of any dwelling, whether occupied, unoccupied or vacant, etc. (description of the building)...whether the property of himself or another, shall be guilty of arson in the first degree.

Burning of buildings other than dwellings.
Second degree arson.

Burning of other property.
Personal property of a certain value (usually over $25.00) is third degree arson.

Attempts to burn buildings or property.
Fourth degree arson.

Burning to defraud insurer.
Any person who willfully and with intent to injure or defraud the insurer sets fire to or burns or attempts to burn or who causes to be burned, or aids, counsels or procures the burning of any building, structure or personal property, of whatsoever class or character, whether the property of himself or of another, which shall at the time be insured by any person, company or corporation against loss or damage by fire, shall be guilty of a felony and upon conviction thereof, be sentenced to the penitentiary for not less than one nor more than five years.

The Golden Rule of Fire Investigation

Look for anything at the scene that does not belong or the absence of anything that does belong.

Question anything unusual—anything that does not "fit" the scene or that stands out because of its presence or absence.

12
glossary

The following terms, used in this booklet or often used in arson investigations, are defined for your convenience:

Accelerant
A substance of any type used to enhance the burning qualities of the material and to increase both the spread and the intensity of fire.

Circumstantial Evidence
Due to the influence of fictional crime stories and television, the term "circumstantial evidence" is badly misunderstood. It is a common belief that conviction by circumstantial evidence is an indication that the individual convicted is not really guilty, but rather simply unable to prove his innocence. This actually is not the case. There are many definitions that have been applied by various courts to the term "circumstantial evidence." Here are just a few:

"Evidence tending to prove such circumstances and facts connected with, or surrounding commission of the crime charged, as tends to show guilt or innocence of the party charged is "circumstantial evidence." (State vs. Johnson, 7 Ohio Law R., 633, 56 Wkly. Law Bull. 95)

"Circumstantial evidence" is proof of facts which stand in such relation to ultimate fact to be proved that such ultimate fact may be inferred from facts proven. (Parker vs. Village of Dover, 18 Ohio N.P., N.S. 465)

"Circumstantial evidence" consists in reasoning from facts that are known proved to establish such facts as are conjectured to exist. (Sweet vs. State, 89 N.Y.S. 2d)

Corpus Delicti
Commonly referred to as "the body of a crime." It is the substantial fact that a crime has been committed. Corpus Delicti has been defined as follows:

"Corpus Delicti" is the substantial and fundamental fact or facts necessary to the commission of a crime and when applied to a particular offense means the actual commission by someone of such offense. (Robinson vs. State, 108 P. 2b-196, 199, 710KO. Cir. 75)

Proving "Corpus Delicti" establishes that a crime has been committed. In the absence of a Corpus Delicti there is no proof that a crime has been committed and, therefore, prosecution is not possible.

Flash Point
The temperature to which a substance must be raised to furnish flammable vapors sufficient to produce a momentary flash of fire upon application of a flame.

Gas Liquid Chromatography
Aid for detecting and separating very small quantities of volatile liquids or gasses. The separated components can then be identified as to type and quantity.

Ignition Point
Also referred to as burning, or kindling, point. The temperature to which a substance must be raised before it will ignite and continue to burn upon the application of a flame.

Motive
That which stimulates or incites an action. There is some cause or reason that moves the will and induces action.

Spontaneous Ignition
Internal development of heat without the action of an external agent that may become so rapid as to produce fire. (Western Woolen Mill Co. vs. Northern Assur. Co. of London, 139F. 637, 639, 72 C.C.A.I.)

A variety of substances will combine slowly with oxygen at ordinary temperature and produce heat. Lack of freely circulating air necessary to dissipate the heat or the presence of a substance that is a poor conductor of heat may allow heat to generate and increase to the kindling or ignition point, causing a fire to occur spontaneously.

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